Time series plot

From Nikola, a postdoctoral researcher

1 Draft version

Intended message. Show the increase in building permits issued after the 2018 Woolsey fire, in response to reconstruction demands, and the other patterns seen in the subsequent years due to the pandemic. This pattern is relevant because the Palisades fire occurred in the same area in 2025, and the accompanying analysis predicts another similar increase in building permit activity.
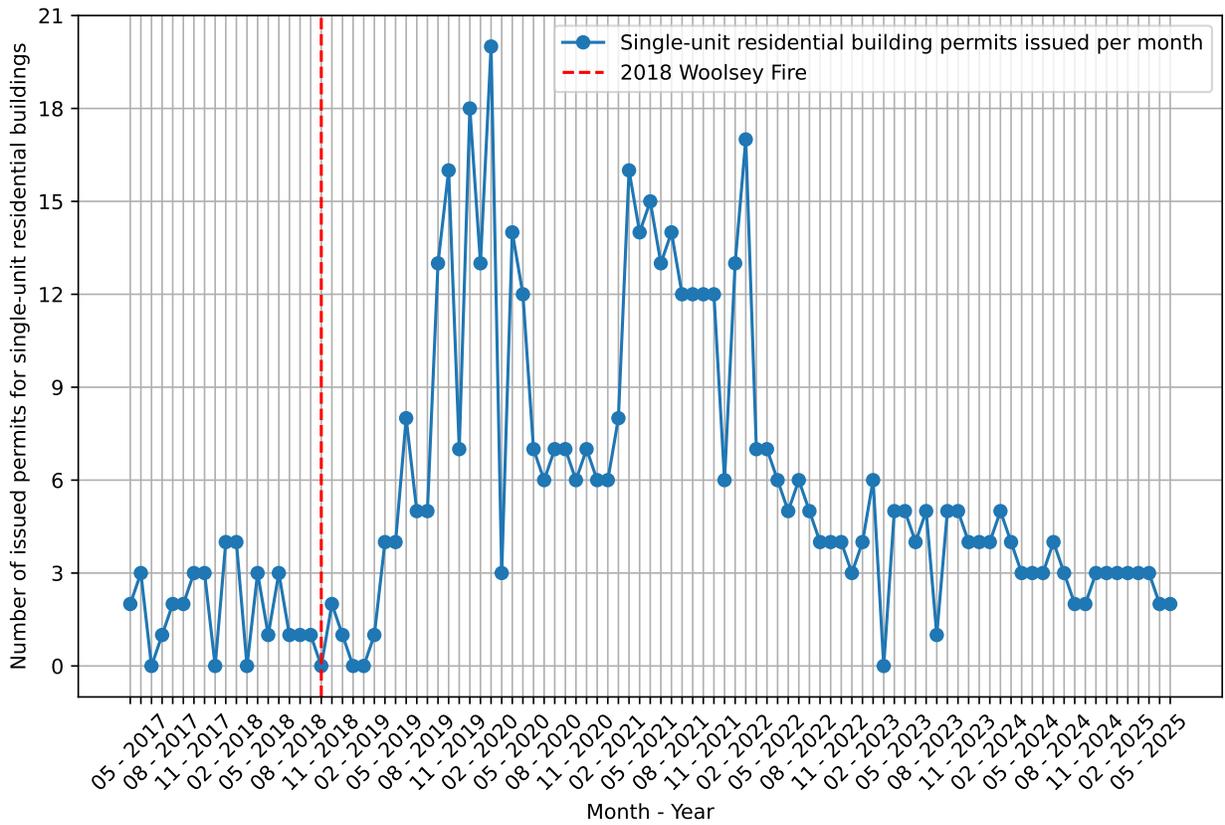

Figure 1 The original figure.

Your observations:

My observations regarding the original figure

- The basic layout is good: showing how permit numbers vary versus time is the basis for the main message.
- Other important events in the time series are not labeled on the plot (the 2020 pandemic, which also impacted permits, and the 2025 Palisades fire).
- The lines connecting the data points draw a lot of visual attention to the month-to-month variations in data, rather than trends.
- The fonts are too small.
- The grid is too prominent, with too many vertical lines.
- There are too many labels on the x axis, impeding quick scanning of values.
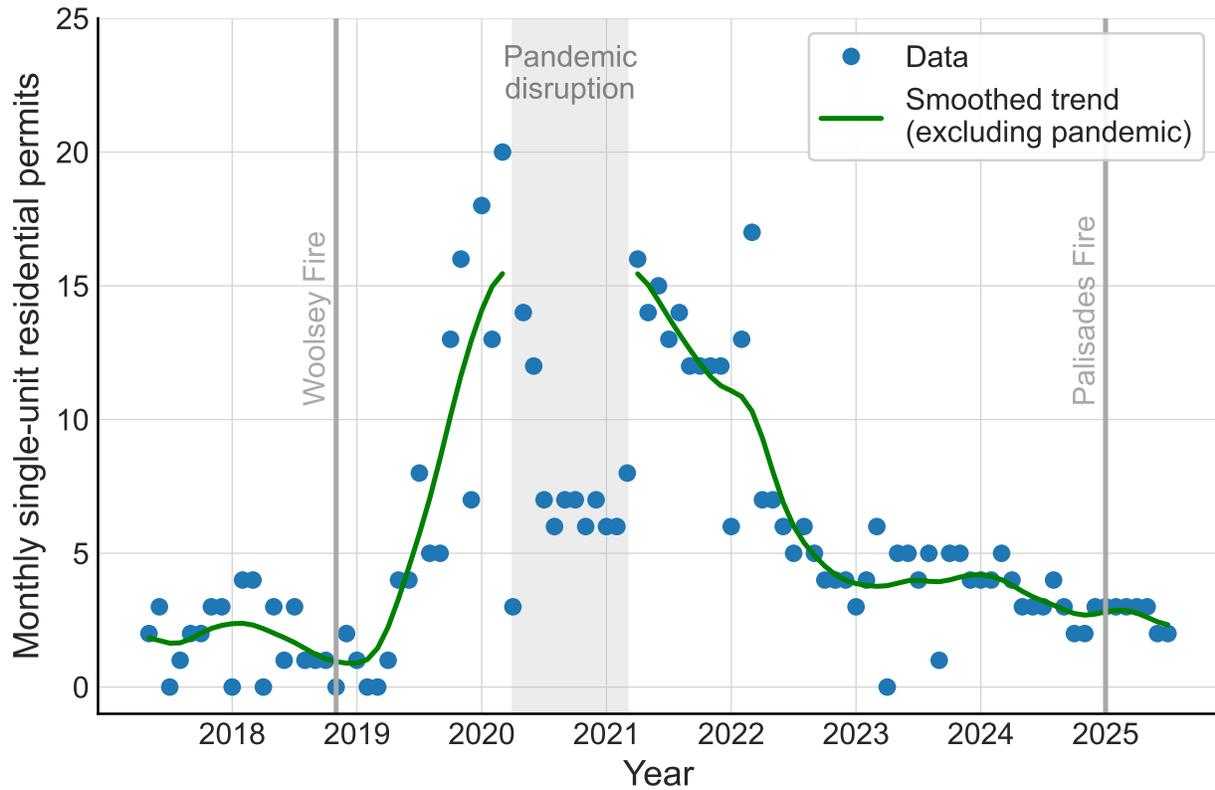
2   Revised version

Figure 2   The revised figure.

Adjustments

- Add additional annotations to mark all relevant dates for discussion.
- Plot the data as only points. Plot a moving average rather than connecting the dots, to emphasize the general trend rather than variability.
- Don't compute a moving average during the pandemic months, as the discussion will highlight the office closures and other impacts mean that these months had differing patterns.
- Adjust grid spacing and lighten color.
- Label fewer values on the axes, but keep small tick marks to enable referencing of specific months if needed.